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USDA's Meat and Poultry Hotline, 1992



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"The meat and poultry hotline... continues to serve as a vital link between the Agency and the consumer..."

--Dr. H. Russell Cross, Administrator, Food Safety and Inspection Service



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### Introduction

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Washington, DC 20250

To call the Meat and Poultry Hotline.dial

1-800-535-4555 (In the Washington, DC area, call (202) 720-3333.)

### **Executive Summary**

#### Mission

The Meat and Poultry Hotline is a service to consumers provided by the U. S. Department of Agriculture's Food Safety and Inspection Service (FSIS). FSIS administers a comprehensive system of inspection laws to ensure that meat and poultry products moving in interstate commerce for use as human food are safe, wholesome, and accurately labeled.

Through its unique program of food safety education, the Meat and Poultry Hotline strives to prevent foodborne illness. Home economists and registered dietitians answering the hotline telephones are experts in the areas of food safety and nutrition. They answer questions on safe storage, handling and preparation of meat and poultry products, emphasizing actions that will lower the risk of foodborne illness.

The hotline also addresses the role of government regulatory agencies in assuring food safety by responding to questions on labeling, food additives, meat inspection and related topics.

In the course of answering consumers' food safety and labeling questions, the hotline discusses the principles of good nutrition embodied in the "Dietary Gnidelines for Americans." (These guidelines are the basis for all Federal nutrition education programs for healthy Americans.) This component complements the hotline's food safety goals. Nutritional guidance helps callers select meat and poultry products wisely, so that when safely prepared, the foods offer the fullest possible health benefits.

### History

The hotline was an outgrowth of an extensive food safety education program that began in 1972. In 1979, a meat and poultry hotline was launched to provide immediate assistance to consumers, but it was a toll call. In 1984, use of a toll-free (800) number was tested in three states, and on July 1, 1985, the Meat and Poultry Hotline became toll-free nationwide. A new era began with the inauguration of the 800 number—calls increased more than ten-fold in the first year.

Research shows that 800 service (a) increases customer satisfaction, (b) decreases the overall cost of customer service, and (c) encourages feedback from customers which is useful in planning and improving service. Having the opportunity to ask questions of a caller leads to a speedier and

more efficient resolution of the caller's problem. Because of this faster and more precise response, customers are far more satisfied with 800 numbers than with letter writing.

In the case of the Meat and Poultry Hotline, "customer satisfaction" connotes increased awareness of food safety precepts along with greater willingness to handle and serve foods with care. These positive outcomes benefit the caller's entire family.

With more and more callers demanding food safety information faster, the Meat and Poultry Hotline figures to be an important part of FSIS' educational program in the coming years.

### Growth in Popularity and Use

In 1992, as in every year of the hotline's existence, the total number of calls (business hours and off-peak hours combined) increased. The hotline received 137.651 calls in 1992—a 45 percent increase over 1991.

In its first year, the Meat and Poultry Hotline received 28.225 calls.

In 1992, the hotline received 137.651 calls.

Though the hotline is used year-round, November has traditionally been the busiest month, with 20 percent of the calls. In a break from that tradition, December was the busiest month in 1992, and November (while busier than November 1991) was second.

### The Typical Caller

Consumer queries, along with limited demographic data, are tracked using a computerized database. Data show the typical hotline user is a consumer calling on her own behalf (80 percent of callers are women), living in the Eastern United States, who learned of the hotline through a newspaper or magazine. The typical caller has a fairly straightforward question, as opposed to a complaint, about the safe storage, handling, or preparation of a perishable product. The caller is most likely to be concerned about chicken or turkey (although questions about beef, pork, or eggs are also quite common).

### Staffing

Questions are handled by a team of home economists, registered dietitians, and food technologists. Staff members have previous and current experience in many food-related disciplines and occupations. Fields of expertise include: adult and secondary education, college and university teaching, journalism, business, sales and marketing, institutional food service management, government service, public health nutrition, analytical laboratory work, health promotion and wellness, and culinary arts.

## Major Accomplishments in the Past Year

The hotline used new voice processing equipment to provide answers to frequently asked questions 24 hours a day. The menu-driven system allows callers with Touch-Tone phones to chose from a wide variety of recorded food safety messages, arranged under eight major headings.

The hotline played a key role in a joint FSIS/FDA public information campaign on *Listeria monocytogenes*. Analysis of caller inquiries indicated an increasing public awareness and concern regarding listeria. Specific caller questions were delineated. FSIS used this information to develop educational materials, so when a major medical journal published results of research into foodborne listeriosis, written materials addressing these questions were ready for distribution to consumers and professionals.

In 1991, the hotline requested and was granted authority to answer basic nutrition questions. This was done not only to increase USDA's avenues for

nutrition education but to allow hotline professionals to correct basic misconceptions and explain food labeling with greater precision. In 1992, the first full year of expanded services, approximately 3 percent of consumer inquiries were nutrition-related. For those who required diet counseling, limited referral service was provided.

Hotline personnel assisted in a campaign to educate consumers about food irradiation. a topic of increasing importance to callers. A study of consumer acceptance of food irradiation by the Meat and Poultry Hotline manager was helpful in charting the campaign.

The hotline guided the production of a slide show and videotape based on FSIS' cornerstone consumer publication, "A Quick Consumer Guide to Safe Food Handling." The slide show has been invaluable for hotline staff in speeches and presentations.

### A Comprehensive Program

The hotline is part of FSIS' comprehensive food safety education program. One-on-one contact with consumers enables hotline food safety specialists to identify areas in which consumer education is needed. Staff are actively involved in the development and dissemination of print and audiovisual materials that teach safe food handling.

The hotline is a valuable resource for the media, other government agencies, and health professionals. On the local level, staff members conduct an energetic community outreach program. Such alliances promote safe food handling practices to millions of people.

# 1992: The Year in Review: Major Accomplishments

### New Voice Processing System

Callers were able to answer many of their most basic food safety questions using the hotline-designed food safety information system, a collection of recorded food safety messages. The menudriven system, available 24 hours a day, allows callers with Touch-Tone phones to chose from a wide variety of recorded food safety messages, arranged under eight major headings. Topics were chosen through analysis of the hotline's most frequently asked questions. Recordings are updated seasonally and as major events warrant.

Installation of additional telephone lines, coupled with the new and more sophisticated call distribution and voice processing equipment, allowed more callers to reach the hotline in 1992. A grand total of 137,651 calls were received, 45 percent more

than in 1991.

A significant portion of callers did use the automated system to strengthen their food safety knowledge. In the months for which data are available, the percentage of callers requesting the list of available topics ranged from 19 to 42 percent. Many of the individual recordings were chosen hundreds of times, and some thousands of times.

Automating information dissemination works best when an agency must respond to repeated requests for the same basic set of facts—sports scores, bank account balances, and the like. In the Meat and Poultry Hotline's experience, recorded messages have been particularly effective in three types of situations.

When meat and poultry products are recalled, consumers often need to check the exact product names, sizes, and codes involved. Since these data do not change, recorded messages largely satisfy this need for information at any time, whether or not hotline staff are on duty. For example, a Dallas television station publicized the service while reporting a hotdog recall on the evening news, and several hundred consumers were able to call for details immediately after the broadcast.

At certain times of the year, call traffic is very heavy but complex questions are few. For example, during the holiday season, many callers may want to know approximately how many minutes per pound and at what oven temperature to roast a turkey. These types of "tips" were offered

under several menus so that callers could quickly obtain this type of help, thus providing an alternative to waiting for the next available food safety specialist.

The automated system was also used extensively after storm-related power failures. Messages helped callers determine which foods should be kept and which should be discarded. Consumers were able to repeat these messages as many times as needed or to select a more detailed message. (Note: During business hours, callers may always transfer to a specialist for live assistance.)

The automated system was beneficial to the overall operation. It ensured that each caller received certain essential information regarding the hotline's mission and hours of operation, thus cutting down on misdirected calls. Generally, the system worked quite well in its first nine months of operation. Faster and more efficient processing of calls during peak times is a goal, and the system will be continually fine-tuned.

### Issues Management

USDA's Food Safety and Inspection Service used knowledge gained through the hotline's monitoring and reporting activities while preparing a successful public information campaign on *Listeria monocytogenes*.

In 1989, the Centers for Disease Control and Prevention (CDC) traced the first case of listerial meningitis to turkey franks. Subsequently, FSIS strengthened its existing monitoring and regulatory policy for listeria in ready-to-eat products. Since then, there have been 20 listeria-related recalls of meat and poultry products. Attendant publicity increased public awareness of listeria and hence inquiries to the hotline.

By 1991, calls to the hotline indicated that consumer concern regarding listeria was growing along with public and media awareness. Specific questions were delineated and FSIS began work on several consumer publications.

In 1992, when an article in the *Journal of the American Medical Association* linked listeriosis to delicatessen and other foods, written materials for distribution to consumers and professionals were nearly ready. FSIS, the Food and Drug Administration (FDA), and CDC worked quickly and cooperatively to provide the public with this information. Targeted audiences included food handlers—in homes, restaurants, retail stores, delicatessens, and institutional kitchens—as well as pregnant women, the elderly, and others at increased risk.

The listeria campaign reached an estimated 35,000 restaurant owners and managers, trade associations, and social service agencies. FSIS filled several hundred requests for additional kits and posters.

The hotline supplies feedback on public food safety concerns routinely, not just in the case of formal educational campaigns. For example, when Hurricane Andrew devastated the southern United States, the hotline provided the Department and the Federal Emergency Management Agency with daily updates on the number of questions and types of concerns voiced by hotline callers.

### Nutrition Education

The first full year of expanded services in the area of basic nutrition was 1992. FSIS is one of several agencies involved in USDA's nutrition education efforts. Because FSIS is responsible for meat and poultry labels, the hotline's nutrition education component will play an important role as revised food labels appear on grocery stores shelves.

In 1992, 3 percent of consumer inquiries (approximately 1,300) were nutrition-related. Almost half of these inquiries pertained to fat and cholesterol. Release of USDA's Food Guide Pyramid prompted other general nutrition questions.

Two-thirds of the nutrition queries were handled by hotline staff. However, the hotline's advice is confined to the information contained in the "Dietary Guidelines for Americans" (Third Edition, 1990); therefore, 443 consumers needing specific nutrient content data and/or diet counseling were referred to other health care professionals. Often these callers were advised to contact the National Center for Nutrition and Dietetics, an 800 number operated by the American Dietetic Association.

Hotline professionals were actively involved in many of FSIS' label education efforts. Several participated in the FSIS-FDA National Exchange for Food Labeling Education (NEFLE). NEFLE maintains a listing of labeling education materials at the National Agricultural Library in Beltsville, Maryland. The Exchange also sponsors meetings and teleconferences to bring the latest labeling news to the public.

#### Food Irradiation

On September 21, 1992, FSIS approved a rule to permit irradiation of raw, packaged poultry to control pathogenic bacteria. This was the latest in a series of developments that focused attention on the promise this technology holds and the long-standing controversies surrounding its use.

A study of consumer acceptance of food irradiation by the Meat and Poultry Hotline manager was presented at various professional meetings. Findings were helpful in planning an educational campaign currently underway. A working group, comprised of several FSIS employees and representatives of other government agencies, carries out the various initiatives in this campaign. One of the first activities was a joint FSIS/FDA mailing of an irradiation information kit to 2,000 regional offices, state departments of agriculture, health departments, and food/health writers.

## Slide/Tape Presentation for Health Educators

Production work was finished on "A Quick Consumer Look at Safe Food Handling." This 14-minute slide/audio tape or VHS videotape presentation (with printed script) is based on FSIS' consumer publication "A Quick Consumer Guide to Safe Food Handling." Prototypes were used regularly by hotline staff for speeches and demonstrations. Audience comments were carefully reviewed. A limited number of copies will be distributed to food safety professionals and health educators in mid-1993.

# Contemporary Food Safety Issues

### **Emerging Pathogens**

Compared to 1991, fewer people asked about specific pathogens and causes of various foodborne illnesses. Salmonella once again was the most widely recognized group of bacteria, but certain "emerging" pathogens—for example, *Listeria monocytogenes*—were mentioned periodically.

### Hot Topics in 1992

- Emerging Pathogens
- The "Storm Season"
- Product Recalls
- Food Irradiation

Cases of illnesses from *Campylobacter jejimi*, *Listeria monocytogenes*, enterohemorrhagic *E. coli* O157:H7, and *Vibrio vulnificns* are predicted to rise in the 1990s. The number of calls to the hotline on these topics has risen through the early 1990s and is expected to climb drastically in 1993.

### Recovery from Natural Disasters

Helping homemakers determine the safety of foods following a power outage is a mainstay of hotline business, and 1992 had more than its share of natural disasters. During the summer and early fall, the Midwest suffered the worst four-day period in history in terms of tornadoes. Earthquakes and aftershocks rocked California and worried residents of other vulnerable areas. Hurricanes Andrew and Iniki devastated parts of Florida, Louisiana, and Hawaii.

One hundred thirty-five survivors of Hurricane Andrew, mostly Florida residents, spoke to members of the hotline staff. They asked how to keep food and drinking water safe as long as possible. Some waited several hours or days until the power had been restored and then double-checked the safety of the few foods they kept. Through a news release and radio interviews, the hotline helped FSIS bring food safety information to many more consumers, including those who may not have had phone service.

#### **Product Recalls**

Product recalls, the subject of just 2 percent of inquiries in 1991, were at the heart of 7 percent of all queries in 1992. Two-thirds of these questions arose from the same recall and were received in the last four weeks of the year.

On December 7, 1992, Campbell Soup Company, Inc., voluntarily recalled 755,000 frozen dinners and cans of soup. (Pieces of glass were discovered in bags of rice used as an ingredient in the products.) Because of its size and scope, this recall (which affected 33 states, Mexico, and Guam), became the dominant issue in December. Some 1,900 consumers asked hotline food safety specialists to confirm the products and codes. Recorded messages, used at all hours, reached thousands of additional callers.

An unusual amount of attention from the broadcast media created an extraordinary and unprecedented demand for the hotline's services. In a matter of hours, newscasts on all major television networks publicized both the recall and the Meat and Poultry Hotline.

The demand for information was well beyond the capacity of the hotline's telephone system. The total number of incoming calls in December—45,939—far exceeded any 1-month total in hotline history, and was more than three times the number of calls received in December 1991.

Most of the product recall questions received prior to December came in the summer months. There were two recalls involving batches of hotdogs which were found to be undercooked.

### Poultry Irradiation

More hotline callers asked about food irradiation in 1992 than in any prior year. There were 382 queries, most pertaining to chicken, and most logged in the days immediately following publication of FSIS' final rule for poultry irradiation.

A sample of irradiation questions received then (mid- to late September) showed 36 percent of callers emphatically opposed irradiating poultry. Another 59 percent asked questions without expressing an opinion, with the remaining 5 percent favoring use of the technology. It was generally true that callers were not in favor of irradiation as strongly as they were opposed to it.

Viewed over the course of the year, reaction was somewhat less negative. Of all the irradiation calls recorded in 1992, only 11 percent conveyed anti-irradiation sentiments.

Callers were reassured to learn that irradiated poultry will be labeled and that traditionally produced products will remain available.

### Food Safety and the News Media

The hotline received approximately 40 comments in response to each of two televised news stories on food inspection. The first raised questions about cattle inspection and the second focused on the food handling practices of the Food Lion grocery chain.

Both were "hidden camera" reports. Perhaps pictures were worth a thousand words, for there were a number of other developments in the area of food policy and regulation that failed to generate more than a handful of consumer calls to the

hotline. There were relatively few questions on new uses of biotechnology, the inspection exemption for meat or poultry pizzas, or the lifting of piece-size restrictions on meat and poultry imports.

The first major reform of food labels in 20 years was of interest mainly to food professionals.

### On the Horizon for 1993

- New Food Labeling
- E. coli 0157:H7
- Modernization of Inspection

### Holiday Season

### Preparation

The November-December holiday season is traditionally the hotline's busiest. As noted, the 1992 season was much busier than expected.

The hotline extended its normal hours of operation (10:00 a.m. to 4 p.m. weekdays) during November, opening from 9:00 a.m. to 5 p.m. weekdays. Special holiday and weekend hours were added close to Thanksgiving (74 percent of November's 20,165 calls were received on or after November 15).

News releases for the print and broadcast media were used to present food safety information to a vast audience at a "teachable moment." Local media made extensive use of this information, as did the major media. Public affairs specialists in each of FSIS' five regions encouraged radio stations to schedule interviews with the hotline management team. The management team completed 112 radio interviews during the season.

The theme of 1992's holiday campaign was "Turkey FUNdamentals," with the accent on fun. In years past, both novice and experienced cooks

have had the same basic types of turkey safety questions. By providing both the information on safe food handling and some needed reassurance, the hotline staff hoped to make these callers' Thanksgiving celebrations more enjoyable.

Recorded messages covered all the turkey basics from freezer to table. These were used frequently.

### Nature of Calls

Most of November's questions dealt with turkey preparation. The emphasis shifted from food storage to food preparation as Thanksgiving approached.

December offered a greater variety in food preparation questions. Callers often asked about distinctive entrees prepared only on special occasions. Mail-order items and homemade gifts were sometimes objects of concern because of known or suspected temperature abuse.

Calls indicated that more stores and food service establishments are offering complete carryout holiday meals. This trend bears watching. Anecdotal evidence showed that consumers may receive inaccurate advice on cooling and reheating these convenience foods.

### **Statistical Summary**

### Call Volume

In 1992, the hotline received more than 137,000 calls, an average of 11,000 per month (See Table 1). This represents a substantial increase over 1991. As noted earlier, much of this increase was due to unusually heavy call traffic in December.

Table 1:	Incoming	Calls	1992
	(24-Hour		

Month	1992	1991	Difference	ce Percent Change
January	7.450	6,919	531	7.7
February	6,080	5,544	536	9.7
March	7,205	6,856	349	5.1
April	7,860	5,792	2,068	35.7
May	6,182	8,394	(2.212)	-26.4
June	6,107	6,486	(379)	-5.8
July	7,140	7,061	79	1.1
August	9,129	7,791	1,338	17.2
September	7,432	5,054	2,378	47.1
October	6,962	5,677	1,285	22.6
November	20,165	18,749	1,416	7.6
December	45,939	10,570	35,369	334.6
Total	137,651	94,893	42,758	45.1

The preceding chart shows all incoming calls. Statistics in remaining sections of this chapter are based on calls logged during regular business hours, a sample consisting of approximately 43.000 inquiries from 40,000 callers.

### Audiences Reached

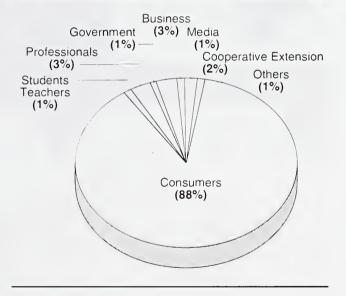
The Meat and Poultry Hotline is used primarily by individual consumers (see figure 1). But the hotline also benefits educators, communicators, and providers of direct client service such as dietitians.

Twelve percent of callers identified themselves as part of some specialized audience—professionals; business people; the media; government officials, including Cooperative Extension agents; students and teachers; consumer advocates; and legis-

lators. Often these callers were actively involved in food safety education. Many were managing foodservice operations and/or serving at-risk populations such as the elderly. (NOTE: Media callers who contacted the hotline manager directly were not considered in the calculations for figure 1.)

Compared to all callers, these constituents asked proportionately more questions about food inspection and government regulatory programs, but their interest was by no means limited to these topics. They asked about storage, preparation, and handling issues too. Especially in the case of business callers, a larger than average number of constituent inquiries were referred to other sources. (For example, vendors wishing to market a new product must contact the appropriate local or Federal authorities directly to obtain inspection or facilities approval.)

Figure 1: Audiences Reached, 1992



Callers value the hotline service enough to use it repeatedly. Twenty-eight percent of those calling in 1992 were repeat customers.

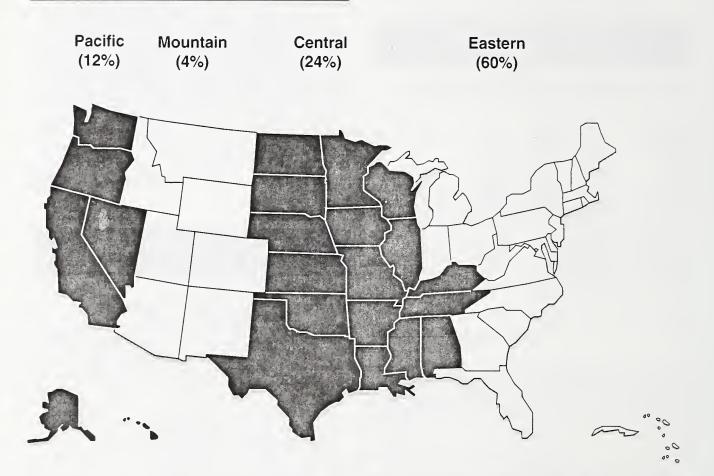
### Callers' Home States

Figure 2 shows that, as in years past, most calls came from the Eastern United States, followed by the Central, Pacific, and Mountain regions.

Figure 2: Hotline Callers'
Home States, 1992

Table 2 shows the top 10 states and the number of calls from each.

Calls came from all 50 states, the District of Columbia, and several foreign countries. (NOTE: From a foreign country, it is a toll call.)

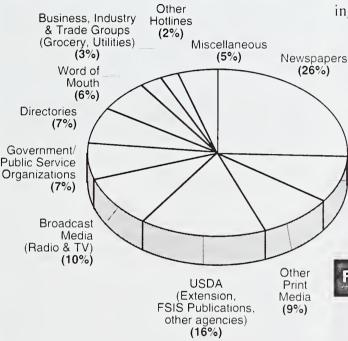


State	Calls
New York	4.589
California	3.459
Florida	2,595
Ohio	2.577
Pennsylvania	2,304
Illinois	2.169
Texas	1.925
Michigan	1.586
Maryland	1.520
New Jersey	1.489

### Source of the Toll-Free Number

(See figure 3.) The means by which first-time callers learn of the Meat and Poultry Hotline stay fairly constant from year to year. In 1992, the number of callers who learned of the hotline through radio or television was up 3 percent; there was a corresponding 3-percent drop in the number of callers who cited print media.

Figure 3: Source of Hotline Telephone Number, 1992: First-Time Callers



### Types of Inquiries

Fewer than 2 percent of customer contacts involved complaints about food products or government policies. Informal complaints, comments of a general nature referring to some condition in the marketplace, outnumbered formal agency-investigated complaints by 3 to 1. (NOTE: Formal complaints are complaints related to specific products which are referred to FSIS' Compliance Division or Meatborne Hazard Control Center. This terminology, "formal" versus "informal," is used only to indicate office handling, and is not meant to imply that some complaints are not taken as seriously as others.)

Alleged illness or injury was the most frequent complaint in both the formal and informal complaint categories. Reports of alleged foreign objects were also common among formal complaints. Conditions at stores or restaurants were second to illness among root causes of informal complaints. Consumers also called the hotline when the appearance, taste, texture, or odor of a food was not what they had come to expect.

### Subject of Inquiry

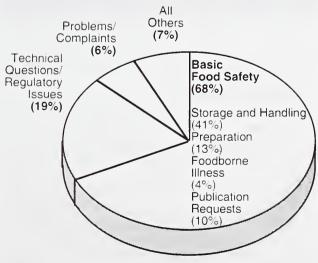
Sixty-eight percent of all questions concerned handling, storing, and cooking meat and poultry safely (see figure 4). The bulk of these queries dealt with storage and handling (freezing and thawing, refrigeration, shelf life, power failures, etc.).

Why do consumers return again and again to

these basic issues? Research indicates that on the whole consumers are not very knowledgeable about the causes of foodborne illness. Furthermore, many of today's consumers grew up without learning much about food preparation or food safety. Lifestyle changes have created a demand for quick and convenient methods of prepa-

Magazines/ Journals (9%) ration, and this demand has given rise to new generations of products, thus, new opportunities for product abuse.

Figure 4: Subjects of Inquiry, 1992



Given that most foodborne illness cases result from mishandling in homes or foodservice establishments, the need for food safety education is clear, as is the reason hotline callers tend to stress these topics.

Nineteen percent of all inquiries dealt with more scientific, technical and regulatory aspects of food protection. More than 2,800 product recall questions were recorded here. Among other topics discussed were meat and poultry inspection, nutrition, product content, dating and labeling, agricultural chemical use, food additives, cookware and packaging.

Reports of unusual, unsatisfactory or faulty products, (including formal complaints) accounted for 6 percent of hotline calls. More than half were

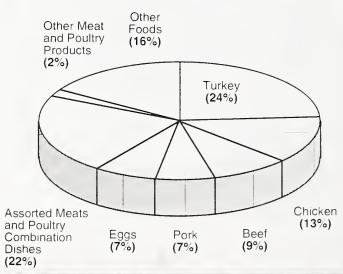
related to product appearance.

Miscellaneous topics, some beyond the scope of the hotline, comprised the remaining 7 percent of questions. When the subject was beyond the hotline's purview, staff referred the caller to the organization best equipped to handle that inquiry.

#### Foods of Interest

Most callers have a specific product or products in mind when they call the hotline. In 1992, 82 percent of all questions were product-specific. Sixty-one percent of the product-specific questions (indeed, half of all questions) pertained to five product categories—turkey, chicken, beef, eggs, and pork. (See figure 5.) Turkey and chicken have topped the list for several years.

Figure 5: Foods of Interest, 1992: Product-Specific Inquiries



Nearly one-quarter of the questions pertained to a whole assortment of foods (this was usually the case following a lengthy power outage) or combination dishes. (NOTE: The combination category was chosen for perishable foods like frozen entrees or casseroles when questions were relevant to the entire item, not just the separate ingredients.)

Other types of meat or poultry (lamb, veal, wild game, etc.) accounted for a small percentage of questions. Of those foods not under FSIS jurisdiction, two groups—fruits and vegetables, fish and shellfish—were asked about most often.

References to specific foods predictably experienced seasonal peaks. Turkey questions prevailed around the holidays, when whole turkeys are commonly served. In the summer months, when outdoor cooking is popular, callers were most interested in chicken. News stories also directed attention to particular foods. New Jersey's efforts to outlaw sale of lightly cooked eggs in foodservice institutions intensified interest in egg safety. The sale of fruit treated at a newly licensed food irradiation facility shifted interest a bit toward produce. These examples illustrate that, although the hotline focuses primarily on meat and poultry products, callers' questions were not limited to those foods.

### Call Management

The hotline strives to connect each caller with the office best able to serve that person's needs. When action must be taken by another agency with legal jurisdiction, or when questions are of a highly technical nature, a referral may be necessary.

In 1992, 91 percent of all inquiries were handled immediately by hotline food safety specialists. Very few (30 inquiries) required further investigation by the hotline staff. Nine percent were referred to another office.

Many of the questions referred by the hotline were ultimately handled by another staff within FSIS and still more could be resolved by another USDA agency. Therefore, it is likely that 94 percent of all hotline inquiries were resolved within USDA.

In most of the remaining cases, the caller was asked to contact the Cooperative Extension System, a trade or industry association, the Food and Drug Administration, or a local or state health department.

In the past, the easy access of an 800 number has induced callers to contact the Meat and Poultry Hotline first, even if their initial investigation suggested that another agency might have been more appropriate. The voice processing system now greets every caller with a message that briefly

describes the hotline's mission. This gives the customer a better idea of what to expect when he or she is connected to a staff member, and has reduced the number of misdirected calls.

### Operations

### Staffing

The Meat and Poultry Hotline staff includes the hotline manager, a management analyst, a supervisory technical information specialist, and seven part-time technical information specialists. Five more technical information specialists are on call to staff the line when call volume is high. The hotline has profited from the experience of professionals detailed from other USDA agencies. Summer interns and junior fellows have also assisted the hotline on a short-term basis.

One strength of the hotline staff lies in its diversity. The group includes nutrition and home economics teachers, public health and community nutrition experts, consumer advisors, microwave cooking specialists, food journalists, and registered dietitians with nursing home and hospital experience.

Profiles of hotline staff members begin on page

### Administration

The Meat and Poultry Hotline unit is part of the Public Awareness Office of FSIS' Information and Legislative Affairs staff. The hotline manager oversees the operation and serves as media spokesperson. A senior staff member directs day-to-day call handling, investigates unusual calls, and reviews complaints.

All hotline food safety specialists have responsibilities in addition to answering consumer calls. Each studies several contemporary food safety issues in depth. Staff members often make speeches, help develop presentations, and write reports or news features on various food safety themes.

To develop food handling recommendations for consumers, the hotline works continually with other FSIS professionals—experts in the fields of microbiology, chemistry, meat and poultry inspection, food technology, epidemiology and foodborne illness, food composition and food labeling. The staff also consults with authorities outside FSIS: Department of Agriculture agencies such as the Extension Service and the National Agricultural

Library, food industry executives, and a network of scientists and researchers at universities throughout the country.

Trends in consumer inquiries are tracked using a computerized database. Information analyses alert FSIS to emerging issues, uncover needs and opportunities for educational campaigns, and gauge consumer reaction to the latest food safety news.

These analyses are particularly effective in identifying new audiences for food safety education. Calls to the hotline inspired an article in the FSIS magazine *Food News for Consumers* targeted to volunteers working at congregate feeding sites (homeless shelters, church and PTA suppers, etc.). Children in daycare and self-care settings were the focus of a special issue of *Food News* and two video news releases.

Staff share and rotate responsibilities for many administrative tasks such as scheduling. The hotline applies the principles of Total Quality Management (TQM) to its operation, and elects on a yearly basis four staff members to serve on a TQM team.

### Staff Training

Technical Information Specialists hired to staff the Meat and Poultry Hotline receive two weeks of formal training in food safety, food and drug law, and customer service. In addition to manuals, videotapes, and briefings, tours of slaughter and processing facilities equip the home economists and dietitians to effectively serve consumers. One senior staff member plans and coordinates staff training, but all staff members help conduct it.

Equally important is the regular inservice training received by all staff members. Ongoing dialogue with agency experts is one of the keys to the hotline's success. Briefings on topics such as new labeling regulations, current controversies in nutrition, and advanced technologies like food irradiation keep the staff up-to-date on matters of concern to callers.

Training is not confined to those topics making the headlines. Periodic "refresher training" covers the fundamentals. Before each holiday season, basic food handling recommendations are reviewed in light of recent findings to see if changes are warranted.

Staff are encouraged to take advantage of opportunities for professional growth. Excellent opportunities exist within FSIS employee development programs. For example, one staff member attended the 1992 FSIS Career Development Academy.

### Media Relations

Hotline supervisors replied to 638 calls from media and consumer affairs professionals in 1992, 178 of them in November. Contacts included 139 major daily and local weekly newspapers, 153 magazines and professional journals, and 159 radio and television stations. (NOTE: These are questions on food handling only. Media calls on policy matters are handled elsewhere within the Agency or Department.)

Other educators and communicators called on behalf of Cooperative Extension offices, government agencies, and trade associations. Free-lance writers, notably cookbook authors, used the hotline as a resource. Several best-selling cookbooks have included the hotline phone number in their most recent editions.

Generally, promotions to editors, writers and reporters described the mission of the hotline, its hours of operation, and government sponsorship. Public service print advertisements, the FSIS magazine Food News for Consumers, and feature press releases were used to reach the print media.

Radio stations were specifically targeted last year. One-page flyers with suggested interview questions on selected topics helped broadcasters structure food safety interviews. Public affairs specialists in FSIS' five regional offices distributed these to local outlets. The program was cost-effective and generated 101 interviews.

Eleven new or re-released video news features were sent out by satellite. In addition to the traditional summertime and holiday topics, video

news releases addressed food safety for children at home and populations at risk for foodborne illness. Television reporters also filmed their own interviews with the hotline staff.

### Other Outreach Efforts

Hotline staff accepted invitations from 23 organizations to attend meetings and speak to the public. In addition to reaching meeting participants, these outreach efforts are part of a "train the trainer" process that encourages professionals to stress food safety in their programs.

Some of these invitations came from private and public schools, service clubs, senior citizen or homemakers groups, and professional organizations based near FSIS headquarters in Washington, D.C. Hotline staff took part in seven national or state-level meetings of professional home economics and dietetic associations. Extension-sponsored workshops, trade association meetings, and an international scientific symposium round out the list.

The hotline is part of FSIS' publication distribution system, and in that role helped distribute hundreds of thousands of free food safety publications in 1992. Publications were mailed to consumers upon request, and some bulk orders from service and educational groups were routed through the hotline.

The Meat and Poultry Hotline, as part of USDA's Food Safety and Inspection Service, is committed to public health protection and total quality service. The hotline will continue to deliver the latest food safety information to all concerned consumers.

### Meat and Poultry Hotline Staff

Sara Beck

Sara Beck joined the hotline staff in October 1990. In prior years, she has been a consultant in the Washington, D.C., area in the fields of food, marketing, and communications. She received a bachelor of science degree in home economics from Catawba College in Salisbury, North Carolina, and a master of science degree in home economics and communications from the University of Maryland. She has worked as a home economist with a North Carolina utility company, nutrition advisor to the executive chef of the Pentagon cafeterias, and a home economist/consumer specialist conducting a nationwide consumer information program for the inspection and grading services of USDA. In addition to handling hotline calls, Ms. Beck continues her consulting work and is writing a cookbook.

Katherine Bernard

Katherine Bernard received a bachelor of science degree in biology from The American University in Washington, D.C., and a master of science degree in food science from the University of Maryland. Her work experience includes 8 years with the National Food Processors Association (NFPA), where she examined exhibits involved in complaints against food processors. Ms. Bernard is a professional member of the Institute of Food Technologists.

Bessie Jones Berry

Home economist Bessie Jones Berry has been with the Meat and Poultry Hotline since June 1986. She serves as front line supervisor, as well as the research and product complaint manager. She has a bachelor of science degree in home economics from the University of Maryland, and a master's degree in consumer affairs from Howard University in Washington, D.C., which included an internship in the White House Office of Consumer Affairs. She has taught foods and nutrition courses in the public schools.

Linda Bowers Burkholder

Linda Burkholder is the Meat and Poultry Hotline management analyst. She began answering consumer calls in 1987 and now analyzes trends in consumer inquiries. For 6 years, she taught home economics in the public schools and has taught food preparation at the college level. She received a bachelor of science degree in home economics education from James Madison University in Harrisonburg, Virginia, and a master of science degree in home economics (nutrition education and human services) from Hood College in Frederick, Maryland. Ms. Burkholder belongs to the American Home Economics Association.

Grace Cataldo, C.n.E.

Grace Cataldo, certified home economist, received a bachelor of science degree in home economics education from New Mexico State University. She previously was a public health nutritionist in New Mexico and El Paso, Texas, supervising local WIC (Women, Infants, and Children) nutrition clinics. Ms. Cataldo demonstrated microwave ovens and small appliances in department stores and has given food preparation classes. She also worked 3 years for the Monterey, California, Independent School District.

### Susan Templin Conley

As manager of the Meat and Poultry Hotline, Susan Conley is responsible for the activities of a management analyst and the 13 full-time, part-time, and on-call home economists who answer hotline phones. She serves as media spokesperson for the Meat and Poultry Hotline, is featured on radio and television programs, and is often quoted in newspaper and magazine articles. She regularly writes for the FSIS magazine *Food News for Consumers*. Prior to joining the hotline in 1985 as a home economist, she was director of sales for a food company. She also has 10 years of experience in retail store management and has supervised a USDA-sponsored daycare nutrition program. Ms. Conley, who has a degree in home economics from the University of Maryland, was a 1992 Kellogg Fellow at the National Center for Food and Agricultural Policy.

Eileen Ferruggiaro, R.D., Ph.D.

Eileen Ferruggiaro received a bachelor of science degree in food and nutrition from The College of St. Elizabeth (New Jersey) and completed a dietetic internship at the University of Wisconsin Hospitals to become a registered dietitian. She then worked as a hospital clinical dietitian for 1 year. Dr. Ferruggiaro received a master of science in institutional food service management from Rutgers University and a doetorate of philosophy in human nutrition from Syracuse University. Dr. Ferruggiaro has taught collegelevel courses in foods, nutrition, institutional food service management, and dietetics at the State University of New York at Oneonta, Syracuse University, and the University of Maryland. Her doctoral dissertation explored the effect of dietary modifications in obese, spontaneously hypertensive rats. She has also worked as a field representative for the USDA Childcare Food Program for daycare providers in Fairfax, Virginia.

Marianne Gravely

Marianne Gravely, home economist, joined the hotline staff in 1988. She has a bachelor of science degree in home economics with an emphasis in foods and nutrition from Hood College in Frederick. Maryland. She has worked as a public health nutritionist, supervised a WIC nutrition program in Virginia, and was a home economist for the Yokusoka Naval Base in Japan. She will receive her master's degree in nutrition from Virginia Polytechnic Institute and State University in Blacksburg in 1993.

Marilyn Johnston

Marilyn Johnston has been with the hotline since May 1987. Her background includes teaching home economics and serving as home service advisor to two major electric utilities in Indiana. She is an expert in microwave cooking, having worked for 12 years for a major microwave company. She received her bachelor of science degree from Purdue University, with a major in foods and business home economics. She is an active member of Electrical Women's Roundtable.

Patricia Moriarty, R.D.

Registered dietitian Patricia Moriarty has been on the hotline since July 1988. She has extensive experience in community nutrition education and health promotion programs. She previously worked for the national High Blood Pressure Education Program and was with the Greater Cincinnati Nutrition Council for 9 years. Ms. Moriarty has a bachelor of science degree in nutrition from Notre Dame College in Cleveland. Ohio, and a master of education degree from the University of Cincinnati. Ms. Moriarty has been active with the American Dietetic Association as a volunteer for marketing, public relations, and media communications programs.

Barbara O'Brien, R.D.

Barbara O'Brien received a bachelor of science degree in home economics from Saint-Mary-of-the-Woods College in Indiana and completed her dietetic internship at Walter Reed General Hospital in Washington, D.C. A registered, licensed dietitian, whose experience has been in hospitals and nursing homes, Ms. O'Brien has been with the hotline since April 1988. In addition to working on the hotline. Ms. O'Brien is active in the American Dietetic Association and Maryland Dietetic Association, and is also involved in the production of nutrition education videos for Montgomery County (Maryland) Community Television.

Robyn Sadagursky

Robyn Sadagursky received a bachelor of arts degree from Brooklyn College and a master of arts degree in management and supervision from Central Michigan University. A registered, licensed dietitian, her experience includes consulting in a hospital and numerous long-term care facilities. In addition, she has been employed as a renal dietitian and a food service director. She is an active member of the American Dietetic Association.

Diane VanLonkhuyzen

Diane VanLonkhuyzen, home economist, has a varied background in the field which includes a position as consumer advisor to a major utility company in the Washington, D.C., area. For 9 years she ran a test kitchen, developing recipes for the company's cookbook and conducting cooking and energy conservation demonstrations in the community. Ms. VanLonkhuyzen has also served as consultant to numerous appliance manufacturers. She has been with the hotline since September 1986, and has a bachelor of science degree in home economics from the University of Maryland. Ms. VanLonkhuyzen coordinates staff training and a variety of other special projects for the hotline.

Mary Wenberg, R.D.

CiCi Williamson, C.H.E

Mary Wenberg received a bachelor of science degree in foods and nutrition from Ohio University. She completed a dietetic internship and earned a master of science degree from The Ohio State University. A registered, licensed dietitian, her experiences include university teaching in clinical nutrition, as well as hospital and school food service. Ms. Wenberg was professionally employed in Ohio, West Virginia, Minnesota, and Texas before moving to the Washington, D.C., area. She is an active member of the American Dietetic Association.

Certified home economist CiCi Williamson brings expertise in the field of microwave cooking to the hotline. In addition to answering consumer calls, she is a syndicated newspaper columnist and author of three microwave cookbooks. Her articles have appeared in Food New York onsumers professional journals, and women's magazines. She has taught microwave seminars for 14 years and is a speaker at major food conferences. Ms. Williamson is past president of both the National Capital Area Home Economists in Business and the International Microwave Power Institute's Consumer Applications Section, an officer of Les Dames d'Escoffier culinary arts society, and a member of the Newspaper Food Editors and Writers Association. Her bachelor of science degree in home economics education is from the University of Maryland.



